

# **Australian Bureau of Statistics**

# 6524.0.55.002 - Estimates of Personal Income for Small Areas, 2011-2015

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 28/04/2017

# **Summary**

### **About this Release**

The information in this release has been sourced from the Australian Tax Office (ATO). It complements the data published in the ATO's Taxation Statistics release.

This release presents regional data on the number of income earners, amounts they receive, and the distribution of income for the 2010-11 to 2014-15 financial years. An improved geocoding process has been introduced for this release. As such, previously released estimates for the 2010-11 and 2012-13 financial year have been superseded.

Data are available for the following categories:

- employee income
- own unincorporated business income
- investment income
- superannuation and annuities
- other income (income not allocated to other income categories and also excluding Government pensions and allowances)
- total income (sum of the above income categories)

These statistics provide insights into the nature of regional economies and the economic well-being of the people who live there. Data can be found by accessing the 'Downloads' tab located in the menu bar on this page.

Information is presented at the following levels of geography of the 2016 edition of the Australian Statistical Geography Standard (ASGS): Statistical Area Level 2 (SA2); Statistical Area Level 3 (SA3); Statistical Area Level 4 (SA4); Greater Capital City Statistical Area (GCCSA); Local Government Area (LGA); state/territory and Australia.

When interpreting these results, it should be noted that some low income earners, for example those receiving Government pensions and allowances, or those who earned below the tax free threshold (which rose from \$6,000 to \$18,200 in 2012-13), may not be present in the data, as they may not be required to lodge personal tax forms. Other individuals may not lodge a tax return even if required, therefore care should be taken in interpreting the data as well as comparing the data in this publication with other income data produced by the ABS. For further information on these data, please refer to the Explanatory Notes.

The Australian Bureau of Statistics wishes to acknowledge the support of the ATO in compiling these statistics.

# **Changes in this Issue**

This edition of Estimates of Personal Income for Small Areas incorporates changes compared with the previous release.

Data are now presented on ASGS 2016 and LGA 2016 boundaries, compared with ASGS 2011 and LGA 2014 boundaries previously.

Coverage has been improved through the introduction of de-identifed payment summary data from the Australian Taxation Office (ATO). These payment summaries are submitted by employers to the ATO and allow for employee income to be geocoded to regions for earners who have not lodged an income tax return.

Income data is now assigned to the regions that earners had stated on the income tax return at the time of the form submission. This is a change to the previous release where earners' regions were determined at the time of data extraction by the ATO. This results in a more accurate way of assigning income to a region, as earners may move address between lodgment of the return and the extraction of data by the ATO.

The method of confidentialisation has changed since last release to include perturbation. Perturbation is a technique which has been developed to randomly adjust cell values. When the technique is applied, all cells are slightly adjusted to prevent any identifiable data being exposed.

Due to the changes in this release, users are cautioned in comparing the data with the previously released estimates for 2010-11 and 2012-13.

# **Explanatory Notes**

# **Explanatory Notes**

#### INTRODUCTION

1 Personal income tax data are supplied by the Australian Taxation Office (ATO) to the Australian Bureau of Statistics (ABS) under the *Taxation Administration Act 1953*, which requires that such data be only used for the purpose of administering the *Census and Statistics Act 1905*. Any discussion of data limitations or weaknesses in these Notes is in the context of using the data for statistical purposes; it is not related to the ability of the data to support the ATO's core operational requirements. Readers should note that legislative requirements to ensure privacy and secrecy of this data have been adhered to. In accordance with the *Census and Statistics Act 1905*, results have been confidentialised to ensure that they are not likely to enable identification of a particular person or organisation.

**2** This issue presents personal income data at various levels of the Australian Standard Geography Standard (ASGS). Regions shown include Statistical Area Level 2, Statistical Area Level 3, Statistical Area Level 4 and Greater Capital City Statistical Areas for each

state and territory of Australia. Data for Local Government Areas (LGA) are also provided. More information about the ASGS is available from the Statistical Geography Portal on the ABS website. The full suite of geographies can be viewed in the data cubes.

- **3** This release contains new regional estimates of the sources of personal income that people received for the 2010-11, 2011-12, 2012-13, 2013-14 and 2014-15 financial years. The data cubes provide a breakdown of total personal income for the following sources Employee, Own unincorporated business, Investment, Superannuation and annuities, Other income (excluding Government pensions and allowances) and Total income from these component sources. Note that the data contained in this release supersedes previously released estimates of personal income data for 2010-11 and 2012-13.
- **4** This publication forms part of the Australian Bureau of Statistics' (ABS) ongoing program to increase the range of regional statistics available, particularly through the use of administrative information collected by other government agencies. The ABS particularly wishes to acknowledge the ATO which provided the valuable data used to compile the statistics presented in this release.

#### **CHANGES IN THIS ISSUE**

- **5** This edition uses a five year time series of data from the ATO. The data is collated by the ATO from individual tax returns and employer payment summaries that have been lodged for the financial years of 2010-11 to 2014-15 inclusive.
- **6** Non-lodgers are now being included in the data. The ABS defines non-lodgers as individuals that have a payment summary issued by an employer but who do not lodge an income tax return. Previously they were not included in the publication, however by gaining access to the data from payment summaries, the ABS is able to go some way in filling the wage and salary income gap for this non-lodger population.
- **7** Net capital gains and related medians for selected regions have been removed from this publication. Net capital gains or losses are not part of the existing ABS investment income, other income or total income framework, so for consistency have not been included in this edition. Please see catalogue 1287.0 Standards for Income Variables, Jun 2015 for further information on ABS income variables.
- **8** The geographic boundaries have been updated to the latest ASGS 2016 and LGA 2016 boundaries. This has meant that some regions have changed either name or their boundary since the last publication. The five year time series of data are all produced on the same boundaries for ease of comparability across years.
- **9** The income statistics are now geocoded using the address on the form of the lodged income tax return. Previously the ABS used the client register of the ATO to geocode the data. The client register was the address of the individual at the time of the data extraction, which could mean that a different address may be recorded on the register to when they originally lodged their income tax return. Using the form address should be a more accurate representation of where the individual resided when lodging the return.

#### SCOPE AND COVERAGE

**10** The main functions and responsibilities of the ATO are to administer taxation legislation and to collect a wide variety of taxes. The ATO therefore collects data from its reporting population as part of its processes to calculate income tax liability for those persons who are required to lodge an income tax return.

- 11 The ATO database covers all individuals who submit an individual income tax return and includes persons with income from one or more of a range of sources, such as wages and salaries, own unincorporated business, superannuation and annuities, investments and Government pensions, benefits or allowances. The scope of the ATO statistics presented in this release are data items relating to income standards the ABS uses for its income surveys. However the scope of the ATO statistics presented in this release exclude Government pensions, benefits or allowances.
- **12** All data presented are gross income before deductions; before tax, Medicare levy or other tax measures (such as the temporary budget repair levy) are applied. The amounts shown are nominal, they have not been adjusted for inflation.
- **13** The income presented in this publications has been categorised into income types, these categories have been devised by the ABS to closely align to ABS' definitions of income. The categories are comprised from the following items from income tax returns (2010-11 income tax return items listed below, other years may have label changes):

#### **INCOME CATEGORIES**

#### **Employee income**

**14** Employee income is the total (or gross) income received as a return for labour from an employer or from a person's own incorporated business (when they are employed by this business). This source of income includes the following data items on the individual income tax return:

- Q1-CDEFG Total income from wage and salary (before tax and application of Medicare levy) as shown on the 'PAYG payment summary - individual non-business';
- Q2-K Allowances, earnings, tips, director's fees, etc;
- Q3-RH Employer lump sum payments;
- Q4-I Employment termination payments:
- Q9-O Attributed personal services income;
- Q12-B Employee share schemes;
- IT1-W Reportable fringe benefits (gross value not adjusted);
- IT2-T Reportable employer superannuation contributions;
- Q20- N Exempt foreign employment income; and
- Q20-T Other net foreign employment income.

Please note that income income tax return labels and names may change over time, the relevant item is used for each financial year.

#### Own unincorporated business income

- **15** Own unincorporated business income is the profit or loss that accrues to owners of, or partners in, their own unincorporated businesses. Profit or loss is the value of the gross output of the enterprise after the deduction of operating expenses, including reportable superannuation contributions, depreciation and operating costs, but before income tax is taken out. Losses occur when operating expenses are greater than receipts and are treated as negative income. This category includes the following data items from the individual income tax return:
  - Q13-NL Distributions from partnerships and trusts (including any franked distributions) for primary production activities;

- Q13-O Distributions from partnerships (including any franked distributions) for nonprimary production activities, less foreign income;
- Q14-A Net personal services income; and
- Q15-BC Net income (or loss) from business.

Please note that income income tax return labels and names may change over time, the relevant item is used for each financial year.

**16** The data excludes distributions from trusts for non-primary production activities as this may include aspects of investment income. It also excludes the income of working directors/owners of incorporated businesses who are classified as employees; consequently their income is included under Wage and salary income.

**17** "Net personal services income" does not include income a person received as an employee, making it different from "Attributed personal services income".

#### **Investment income**

**18** Investment income includes the following data items on the individual income tax returns:

- Q10-L Gross interest;
- Q11-S Dividends unfranked amount;
- Q11-T Dividends franked amount;
- Q11-U Dividends franking credit;
- Q13-U Distribution from trusts less net capital gains, foreign income and franked distributions- non-primary production;
- Q13-C Franked distributions from trusts non-primary production;
- Q20-F Australian franking credits from a New Zealand company;
- Q20-R Net foreign rent; and
- Q21-U Net rent.

Please note that income income tax return labels and names may change over time, the relevant item is used for each financial year.

#### Superannuation and annuity income

- **19** Superannuation and annuity income includes the following data items on the individual income tax returns:
  - Q7-JN Australian annuities and superannuation income streams:
  - Q7-YZ Australian annuities and superannuation income streams lump sum in arrears:
  - Q8-QP Australian superannuation lump sum payments; and
  - Q22-W Bonuses from life insurance companies and friendly societies.

Please note that income income tax return labels and names may change over time, the relevant item is used for each financial year.

**20** A change to legislation relating to superannuation, taking effect from 1 July 2007, meant that people aged 60 years and over who receive superannuation income in the form of a lump sum or income stream (such as a pension) from a taxed source, receive that income tax free. Therefore, if a person has no other income, or their total income is below the tax-

free threshold, or any tax payable is mitigated by a tax offset (such as Senior Australian Tax Offset), then this person is not required to lodge a tax return.

**21** Due to such changes, the superannuation estimates (persons, income) published in this publication are regarded as partial, subject to under-coverage. A more comprehensive snapshot of superannuation income (at aggregate state/territory level) can be obtained from the ABS Survey of Income and Housing - see Household Income and Wealth, Australia, 2013-14.

#### Other income (excluding Government pensions and allowances)

22 Other income (excluding Government pensions and allowances) comprises income items reported on the individual income tax return that were not allocated to one of the above categories. For example, Other income can include transfer or trust income, controlled foreign company income, net foreign pension and annuity income, and foreign investment and life assurance income. Other income (excluding Government pensions and allowances) includes the following data items on the individual income tax returns:

- Q19-B Foreign entities transfer or trust income;
- Q19-C Foreign investment fund and/or foreign life assurance policy income;
- Q19-K Controlled foreign company income;
- Q20-LD Net foreign pension/annuity income;
- · Q20-M Other net foreign source income; and
- Q24-VY Other income.

Please note that income income tax return labels and names may change over time, the relevant item is used for each financial year.

23 As indicated, Government pensions, benefits or allowances are excluded from the ABS income data and do not appear in Other income or Total income. Pension recipients can fall below the income threshold that necessitates them lodging a tax return, or they may only receive tax free pensions or allowances. Hence they will be missing from the personal income tax data set. Recent estimates from the ABS Survey of Income and Housing (which records Government pensions and allowances) suggest that this component can account for between 9 to 11% of Total income.

#### **Total income (excluding Government pensions and allowances)**

**24** Total Income is the sum of all income derived from Employee income, Own unincorporated business, Superannuation and annuities, Investments and Other income (excluding Government pensions, benefits or allowances), as defined above.

#### INCOME DISTRIBUTION INDICATORS

#### Gini coefficient

**25** Taken together, the simple measures of income distribution such as mean, median, percentile ratios and income shares can provide an indication of differences in the income distributions of two separate regions. However, none of the simple measures comprise a single statistic that summarises the whole income distribution in a way that directly considers the individual incomes of all regions. In this publication, the Gini coefficient is used to compile a single statistic of inequality by summarising the distribution of income across the population in each region.

- **26** The Gini coefficient is provided here for total income (excluding Government pensions and allowances). This is a single statistic that lies between 0 and 1 and is a summary indicator of the degree of inequality in income between members of the tax form lodging population. Values closer to 1 represent greater inequality.
- 27 The Gini coefficients shown in this publication can be regarded as indicative but not definitive. They should not be directly compared with apparently similar ABS information at state/territory level, as per Household Income and Wealth, Australia, 2013-14. The Gini coefficients presented in this publication are also calculated from gross personal income and not from equivalised disposable income as presented in Household Income and Wealth, Australia, 2013-14. There is also an acknowledged under-coverage of certain income groups in taxation data due to tax exemptions, and people being under the tax free threshold. For instance, persons aged 60 years and over who are mostly dependent on superannuation income and those mostly reliant on government pensions and allowances may be missing from the tax data.
- **28** From another perspective, the coefficients have been included to demonstrate the finer regional data capability afforded by the ATO personal income tax data set. The majority of sample surveys with an income aspect cannot support the production of reliable estimates for granular geographies such as SA2, SA3 or LGA.

#### **Percentiles**

- **29** Personal income data derived from the taxation dataset are presented in percentiles. When all persons in the tax form lodging population are ranked from the lowest to the highest based on a common characteristic such as total income, they then can be divided into equal sized groups. Division into 100 groups gives percentiles. For example, the highest value of the characteristic in the twentieth percentile is denoted P20. The median or top of the 50th percentile is denoted as P50. P20, P50 and P80 denote the highest values in the 20th, 50th and 80th percentiles respectively. Ratios of values at the top of selected percentiles, such as P80/P20, are termed percentile ratios.
- **30** Percentile ratios summarise the relative distance between two points in a distribution. To illustrate the full spread of an income distribution, percentile ratios often present points near the extremes of the distribution, for example as a P80/P20 ratio. However, for personal income tax data, the P80/P20 ratio is thought to better illustrate the magnitude of the range within which the income of the majority of people fall. The P80/P50 and P50/20 ratios focus on comparing the ends of the income distribution with the midpoint.

#### **Medians**

**31** Median income is that level of income which divides the units in the reference population into two equal parts, one half having incomes above the median and the other half having incomes below the median.

#### Quartile

**32** Quartiles are groupings that result from ranking all persons who lodged tax returns in ascending order according to total income, and then dividing them into four equal groups, each comprising 25% of the reference population. In this publication Australia's quartile ranges are used to compare the income distributions of regions to Australia.

#### Income share

**33** Income share (% of income held by the top 1%, 5% and 10% of all earners, per region) has also been produced. The aggregate income of the units in each percentile is divided by the overall aggregate income of the entire population to derive income shares.

#### **Main Source of Income**

- **34** Main source of income is the source from which a person derives most of their income. In this publication, main source of earners is presented as a proportion of the population in that region.
- **35** If a region is particularly reliant on one source, it may be susceptible to policy or economic changes that affect that income type hence the inclusion. Where persons receive exactly the same amount across multiple sources of income, they have been excluded from the derivation of this indicator. Persons with negative or nil income total income have also been excluded.

#### **Median Age of Earners**

**36** Median age by income type has been provided for all geographies in this publication. See paragraph 31 for explanation of medians.

#### **Counts of individuals**

- **37** Individuals may receive income from a number of sources. Also, net income from a specific source may be positive or negative. For example, an individual may have positive income from Employee income yet negative net income from Investment income. The number of individuals for each income source includes all persons with either positive or negative net income from that source.
- **38** Readers should note that the total number of individuals in receipt of income from at least one source cannot be calculated as the sum of the individuals in each income category, since people can have more than one source of income in any given year. For example, an individual could derive income from multiple sources such as Employee income, investments and their own unincorporated business and thus contribute to the regional person count in all three income categories.

#### **DATA CONSIDERATIONS**

- **39** There are several considerations that users should be mindful of when interpreting the ATO data. See paragraphs 40 and 41 below. Overall, these considerations are not seen as being so severe that they would lead to the production of misleading information. Nonetheless, readers are advised to take them into account when analysing the results.
- **40** Generally, the ATO considers someone to be an Australian resident for tax purposes if they have either always lived in Australia or have come to Australia to live permanently, or they have been in Australia for more than half of the financial year (unless their usual home is overseas and they don't intend to live in Australia), or they have been in Australia continuously for six months or more and for most of that time have been in the one job and living in the same place, or they are an overseas student enrolled in a course of study for more than six months duration.
- **41** For the purposes of providing statistical measures for the entire population, the ATO database has some limits to its coverage. As indicated previously, persons who receive an income below certain levels are not necessarily required to lodge a tax return. This can

include persons who derive their income from Government pensions and allowances. Consequently, the coverage of low income earners, including people receiving government pensions and allowances, is incomplete in ATO records. In addition, some Commonwealth of Australia Government pension, benefit and allowance payments are exempt from income tax and are therefore do not need to be reported in tax returns. As such, the ATO data should be regarded as an indicative though not complete picture of all individual income earned in Australia.

#### Non-lodgers

- **42** Some individuals may not lodge a tax return, this population may have income that is in scope of this publication and as such their absence should be taken into consideration. For the first time the ABS has been able to access data from payment summaries. The payment summaries data is cross checked against income tax returns to see if the data has been declared. If it has not been declared, the data from the payment summary is added to the aggregate income figures for each individual region, and is also used in calculating mean and median employee and total incomes.
- **43** As payment summaries only contain limited data, it is only used purely to fill the gap with employee and total incomes. The payment summary data is not used where certain demographic or employment characteristics are needed e.g. occupation, age, and sex. Hence, non-lodgers are not used in the cross classified datacubes: Employee Income by Age and Sex, Employee Income by Occupation and Age, Employee Income by Occupation and Sex.

#### **Processing of tax returns**

- **44** The data presented in this publication were compiled before the processing of all income tax returns for any given year may have been completed. Data provided to the ABS by the ATO are from returns processed up to 31 October, 16 months after the end of the financial year. Any returns lodged after this date are not included. For example, returns processed after 31 October 2014 are not included in the estimates for the 2012-13 financial year presented in this publication.
- **45** Because of the late lodgement of tax returns in any tax reference year, the data provided in this report underestimates the total taxable income for any given financial year. It is estimated that up to 5-6 per cent of tax returns for any reference year are lodged 3-4 years later.

#### Changes in taxation policy

**46** Users of the data should note that there may be taxation policy changes that will influence the lodging of tax returns, as well as the amounts declared. One change that may impact the data is the increase of the tax-free threshold of \$6,000 to \$18,200 for the 2012-13 financial year, this may result in less people needing to lodge a tax return. The ABS strongly encourages users of the data to research policy changes that may impact in the comparability of the data year to year. For more information on taxation policy change, the ATO publishes changes in their Taxation Statistics publications.

#### CONFIDENTIALITY

- **47** All individual income tax statistics have been provided by the ATO in form and then geocoded to Statistical Area Levels 1, 2, 3 & 4 and Local Government Areas.
- 48 To minimise the risk of identifying individuals in aggregate statistics, a confidentialisation

process called perturbation has been applied to the data. Perturbation involves small random adjustment of the statistics and is considered the most satisfactory technique for avoiding the release of identifiable statistics while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. Some cells have also been suppressed due to low counts.

**49** Apparent outlier values are treated to ensure more coherent data (less skewed values) at the regional level. Other additivity features (e.g. totals may not exactly match the sum of components) also reduce the risk of deducing real values.

#### **COMPARISON WITH OTHER ABS INCOME DATA**

- **50** The ABS Survey of Income and Housing (SIH) collects information on sources of income, amounts received and the characteristics of persons aged 15 years and over resident in private dwellings throughout Australia. Some data on income earned by children is also captured. Since 2003-04, SIH has been conducted biennially, with the most recent snapshots being the 2009-10, 2011-12 and the 2013-14 income years. Additional SIH estimates of annual income are produced for the survey gap years. Hence, SIH produces both estimates of current income as well as estimates of annual income with respect to the previous financial year. The latter source has been used to create the comparison of SIH household income with ATO personal income data, for 2012-13, shown in Table 1, below. For further information about the concepts, definitions, methodology and estimation procedures used in SIH, please refer to Survey of Income and Housing, User Guide (cat. no. 6553.0).
- **51** SIH employee income includes all payments received by individuals as a result of their current or former involvement in paid employment. In addition to the regular and recurring cash receipts captured by SIH, employee income also includes non-cash benefits, bonuses, termination payments and payments for irregular overtime. Details of the composition of employee income derived from ATO sources are provided in Explanatory Note 14 (above).
- **52** Table 1 below presents a selection of reasonably comparable income data items, sourced from ATO and the SIH, for 2011-12 and 2013-14.

Table 1. SELECTED SOURCES OF INCOME, EoPI AND SIH DATA, 2011-12 and 2013-14, AUSTRALIA					
	EoPI 2011-12 \$b	SIH 2011-12 \$b	EoPI 2013-14 \$b	SIH 2013-14 \$b	
Employee Income	573.3	591.6	648.8	679.4	
Own Unincorporated Business Income	42.4	46.4	45.3	47.7	
Investment Income	70.0	42.3	79.5	67.3	
Superannuation and Annuity Income	9.8	23.0	10.7	31.4	
Total income - percentile ratios					

P80/P20	5.09	4.45	4.86	4.33
P80/P50	1.88	1.90	1.88	1.92
P20/P50	0.37	0.43	0.39	0.44
P10/P50	0.16	0.28	0.17	0.29
Total income - Gini coefficient	0.483	0.427	0.483	0.446

- **53** Differences in collection methodologies, data collection/extraction periods, definitions, scope/coverage etc., can all contribute to variations between EoPI and SIH income data. Also, as mentioned before, SIH presents data for low income households whereas the EoPI series may be missing some individuals with low incomes (for example those under the \$18,200 tax free threshold) because they may not need to lodge tax returns. Please see the Quality Declaration in the publication for more information about coherence.
- **54** Since changes were applied to the reporting superannuation income in 2007 (see paragraphs 20-21), the SIH estimate is thought to provide a more accurate, complete indication of the level of income derived from Superannuation and annuities. However, SIH estimates only include superannuation pension streams and not superannuation lump sum payments.

#### STATISTICAL GEOGRAPHY

- **55** All geographic variables are based on the individual's residential address as stipulated on the income tax return, or for non-lodgers, the address listed on the payment summary.
- **56** The Australian Statistical Geography Standard (ASGS), July 2016, is used by the ABS for the collection and dissemination of geographically classified statistics.
- **57** The ASGS is an essential reference for understanding and interpreting the geographic context of statistics published by the ABS and its use enables comparability across datasets. The ASGS has been implemented by the ABS, in part, to obtain more consistency in population size across similar region types, to achieve more data stability and continuity and thereby minimise the need for annual geographic review and change.
- **58** Further information including access to ASGS boundaries which underpin the data presented in this publication can be accessed from Australian Statistical Geography Standard (ASGS): Volume 1 Main Structure, July 2016.

#### **Geographic regions**

- **59** The statistics in this release are presented according to the Australian Statistical Geography Standard (ASGS), July 2016. Under this classification, statistical areas are defined as follows:
  - Local Government Areas (LGA): These areas are the spatial units which represent the geographical areas of incorporated local government councils. LGAs include sub categories such as Cities (C), NSW Local Government Areas (A), Boroughs (B), Rural Cities (RC), Towns (T), Shires (S), District Councils (DC), Municipalities (M), SA Municipal Councils (M), SA Regional Councils (RegC) and Qld Regional Councils (R). Unless stated otherwise, data are presented for LGA boundaries at 2016.
  - Statistical Area Level 2 (SA2): These are general purpose, medium sized areas designed to represent communities that interact socially and economically. SA2s

generally have an average population of 10,000 persons, or a population size range of 3,000-25,000 persons, tending towards the lower limit of this range in rural and remote regions.

- Statistical Area Level 3 (SA3): This geography has been created as a standard for the analysis of ABS data at broader geographies through the clustering of SA2s with similar regional characteristics. Generally, SA3s have a population size range of 30,000-130,000 persons.
- Statistical Area Level 4 (SA4): These are the largest sub-state regions within the main structure of the ASGS. They have been primarily designed to output labour force data, reflecting recognised major labour market regions in each jurisdiction. Population size can range from 100,000-300.000 persons, tending towards the lower limit in rural and regional areas.
- Greater Capital City Statistical Area (GCCSA): These geographies, comprising 8 capital cities and their wider metropolitan surrounds, are aggregations of SA4s. When combined with 7 Rest of State/Territory regions, they cover the whole of Australia without gaps or overlaps, aggregating directly to all States and Territories. A slight exception: the entire Australian Capital Territory comprises one GCCSA, without a 'Rest of' regional component.
- **60** Further information regarding the ASGS regions, including the detailed classification, metadata, maps and downloadable boundary files, can be accessed from the ABS Statistical Geography Portal on the ABS website.
- **61** Details of income earners from regions unknown (not stated or indeterminate), or who are lodging returns from overseas, have been classified as such and included in the totals shown. Therefore, the totals shown for Australia may not necessarily be the sum of all state and territory totals.
- **62** The sum of sub state geographies (GCCSA, SA4, SA3, SA2 and LGA) may not equal the state estimates due to some records having inadequate address information to be geocoded. Where a record was unable to be geocoded to an SA2, it has not been included in totals for SA2 right through to GCCSA. However, where possible, these records have been included in the state and Australia totals.
- **63** Confidentiality rules have been applied to the estimates to ensure there is no likely risk of individuals in the aggregate statistics presented in this publication. Therefore, the sum of sub-state estimates may also not equal state estimates due to some regions being suppressed through the confidentialising process.

#### **ACKNOWLEDGEMENTS**

**64** The ABS acknowledges the continued support provided by the ATO in compiling these statistics.

#### **FURTHER INFORMATION**

**65** For further information about these and other statistics, please contact the National Information and Referral Service on (Phone) 1300 135 070 or Email regional.statistics@abs.gov.au. For example, some of the data published in this catalogue can also be produced for Commonwealth Electoral Division regions, on a consultancy basis.

### **Glossary**

### **Abbreviations**

#### **ABBREVIATIONS**

A Area \$ dollars '000 thousand

ABR Australian Business Register
ABS Australian Bureau of Statistics
ACT Australian Capital Territory

AC Aboriginal Council

ASIC Australian Securities and Investments Commission

ASGS Australian Statistical Geography Standard

ATO Australian Taxation Office

Aust. Australia
B Borough
b billion

cat. no. catalogue number

C City

DC District Council

EoPI Estimates of Personal Income

excl. excludes or excluding

Govt Government

GCCSA Greater Capital City Statistical Area

LGA Local Government Area

M Municipality/Municipal Council

m million

na not available np not for publication

no. number

NSW New South Wales NT Northern Territory

OUB Own Unincorporated Business

PIT Personal Income Tax

PAYG Pay as you go Qld Queensland R Regional Councils

RC Rural City S Shires

SA South Australia S/T state or territory

SA2 Statistical Area Level 2 SA3 Statistical Area Level 3 SA4 Statistical Area Level 4

SIH Survey of Income and Housing

T Town Tas. Tasmania Unincorp. Unincorporated

Vic. Victoria

WA Western Australia

# **Quality Declaration**

#### **QUALITY DECLARATION**

#### Institutional Environment

These estimates of personal income published by the ABS are sourced from the Australian Taxation Office (ATO). The ATO collects personal income tax information from the lodged personal income tax returns as part of their role to manage and shape the tax and superannuation systems that support and fund services for Australians.

The ATO compiles a range of data from this collection for release on the ATO website. An extract of personal income tax is provided to the ABS on an annual basis under a Memorandum of Understanding (MOU) between the ABS and the ATO.

Individual tax return data, and payment summaries data for the financial years 2010-11 to 2014-15 have been provided by the ATO to the ABS as a Unit Record File.

For information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

#### Relevance

Personal income data are produced by ABS at regional (small area) level to provide valuable information about regional economies and the income of individuals resident in regions. This annual regional level income data is not available from existing ABS censuses and surveys.

The scope of the personal income tax data includes individuals who submit an individual income tax return to the Australian Tax Office, and individuals who have had a payment summary issued by an employer and then remitted to the ATO.

The main statistics released from ATO personal income tax data are the number of persons and the amount of income from wages and salaries and other employee related payments (Employee income), Own unincorporated business income, Investment income, Superannuation and annuities income, Other income (excluding Government pensions and allowances) and Total income (excluding Government pensions and allowances). Other income measures such as mean and median income, and income percentile indicators (80<sup>th</sup>, 50<sup>th</sup> for example) are also produced.

Data for source of income categories are aggregated from line items in the individual income tax return, and are selected to conform as closely as possible to ABS Income Standards.

These statistical releases are presented at the following levels of geography of the Australian Statistical Geography Standard (ASGS): Statistical Area Level 2 (SA2); Statistical Area Level 3 (SA3); Statistical Area Level 4 (SA4); Greater Capital City Statistical Area

(GCCSA); Local Government Area; and state/territory, Australia.

#### **Timeliness**

Individuals may lodge income tax returns in respect of each financial year (1 July to 30 June). The de-identified personal income tax data for the financial years 2010-11 to 2014-15 was provided to the ABS in December 2016.

Data are taken from an extraction from the ATO database. As this single extraction contains data for multiple years, a 16 month cut off is applied to each reference year so that the number of returns lodged for each year would be comparable. For example, data for the 2012-13 financial was compiled by using the tax returns lodged between 1 July 2013 and 31 October 2014.

#### **Accuracy**

Personal income tax data is derived from information contained in personal income tax returns lodged with the Australian Taxation Office. For the purposes of providing statistical measures for the entire population, the ATO database has some limitations in its coverage. Persons who receive less than the taxable income threshold are not necessarily required to lodge a tax return. This can include persons who derive their income from government pensions and allowances, and occasional or temporary workers. Consequently, the coverage of low income earners is incomplete when looking solely at tax returns. The ABS partially fills this gap by also requesting payment summary data that are submitted by employers.

Other streams of income – for example some superannuation income received by persons aged 60 years and over are currently tax exempt. Hence estimates of superannuation and annuities income from the tax file will be understated.

Data are provided by the ATO before the processing of all income tax returns for any given year may have been completed. Data provided to the ABS by the ATO are from returns processed up to 31 October, 16 months after the end of the financial year. It is estimated that approximately an additional 3% of taxpayers lodge their income tax returns in the twelve months after the initial processing cut off each year and approximately 5% of taxpayers lodge their income tax returns in the three years following the processing cut off. This means that data provided to the ABS slightly under-estimates the 'final' number of income earners and the total income earned.

Perturbation is applied to the data that is published by the ABS. Perturbation is the process of slightly adjusting each cell. Because of this treatment, the data is altered compared with the original untreated form. The effects of this treatment is slight at the larger cell level but can be more pronounced with small cells - so care should be taken in interpreting small counts.

#### Coherence

Personal income tax statistics can be impacted by changes to tax legislation. For example in 2012-13, the tax reporting threshold rose from \$6,000 in the previous financial year to \$18,200. The ATO outlines any such changes in their annual release of 'Taxation Statistics' on the ATO website. Table 1 outlines the tax free threshold amounts between 2010-11 and 2014-15.

Financial Year	Tax Free Threshold	
2010-11	\$6,000	
2011-12	\$6,000	
2012-13	\$18,200	
2013-14	\$18,200	
2014-15	\$18,200	

Table 2 below shows the number of returns lodged for each financial year.

Financial Year	Returns lodged	
2010-11	13,445,995	
2011-12	13,450,282	
2012-13	13,361,080	
2013-14	13,370,182	
2014-15	13,213,814	

Data for income categories described above (see Relevance) are aggregated from line items in the individual income tax return, and are selected to conform as closely as possible to ABS Income Standards.

Other ABS sources of income data are:

- the Survey of Income and Housing;
- the Survey of Average Weekly Earnings;
- the Census of Population and Housing; and
- the Australian System of National Accounts.

The ABS Survey of Income and Housing (SIH) also collects information on sources of income, the amounts received and related household characteristics. A few major points of difference should be noted however. SIH has a wider coverage of all income earners; it will also capture details for people receiving pensions, or low incomes, or receiving tax exempt superannuation income, who may not be required to lodge tax forms. From another perspective, smaller area estimates are not released from SIH. Being sample survey based it cannot support the production of representative estimates for smaller geographies (such as Statistical Area Level 2, or Local Government Areas). Nonetheless, a comparison of SIH with ATO data for Australia can provide a means of assessing the shape of data movements over time; and generally indicate whether counts are of an expected magnitude and whether the distribution of income across the various sources is similar.

The Survey of Average Weekly Earnings (AWE) is a six monthly sample survey of employing businesses. It collects data on average weekly earnings for full-time adult employee jobs, average weekly total earnings for all employee jobs, and average weekly ordinary time earnings for full-time adult employee jobs. Being sample survey based, AWE cannot support the release of small area (sub state) estimates. While the ATO mean income levels for Employees can be compared at the Australia level with the 'average weekly total earnings for all employees jobs' from AWE, they will differ partly due to the tax free thresholds applied; some low income earners captured in AWE will be missing from the tax data. Also AWE does not capture details from non-employing businesses.

Income data is also available every five years in the Census of Population and Housing. The Census provides income details for for households, families and individuals. Data are available for a wide range of small areas. Table 3 outlines some of the differences in income measures between Estimates of Personal Income for Small Areas and the Census.

Difference	Estimates of Personal Income for Small Areas	Census of Population and Housing
Reference period	2010-11 to 2014-15 financial years	August 2016
Population	Individuals with income reported to the ATO (approx 13 million records per year)	All persons aged 15 years and above (approx 20 million records)
Method of reporting	Administrative data, dollar and counts	Self reported income in ranges
Missing income	Income not reported to the ATO.  People who earn under the tax free threshold or receive payments that are not assessable (such as some Government benefits and allowances).	None - Census asks to consider all income when answering income questions.

The Australian System of National Accounts (ASNA) brings together employee income estimates from multiple sources, including a range of quarterly and annual business surveys. The data are also updated iteratively whereas the SIH and ATO data are more 'point in time' snapshots. Whereas the ASNA mainly sources data from businesses and the government sector, the ATO and SIH data are primarily sourced from individuals; this methodological difference contributes to some variation in estimates across these collections. A comparison of income data from SIH and ASNA sources, and using selected ATO elements, can be found in Survey of Income and Housing, User Guide, 2012-13.

Due to the different sources of collection and different coverage of the population of income earners, care should be taken in comparing the data in this release with other income data released by the ABS.

#### Interpretability

Estimates of personal income in this release are gross income before deductions, and before tax and application of the Medicare levy, Medicare levy surcharge and temporary budget repair levy.

Data is nominal, so not adjusted for inflation.

ABS releases of personal income tax data provide detailed Explanatory Notes which contain information on scope and coverage, confidentiality, definitional changes, the geographical presentation of the data, classifications and other technical aspects associated with these statistics.

#### **Accessibility**

This data will be available in the following formats:

- Estimates of Personal Income for Small Areas (cat. no. 6524.0.55.002) with a summary, downloadable Excel spreadsheets (data cubes) and detailed Explanatory Notes.
- Data by Region which contains regional source of income estimates and employee income earners data (cross referenced by age, sex, occupation) as downloadable data cubes. Detailed Explanatory Notes are also provided. Data regions can be selected from a map or by using other search functions provided.
- ABS.Stat a repository of the Data by Region data. ABS.Stat allows users to create their own tables and graphs.

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